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     (FILE 'HOME' ENTERED AT 15:38:58 ON 17 APR 2005)

     FILE 'CAPLUS' ENTERED AT 15:39:05 ON 17 APR 2005
L1            23 S 99614-01-4/PREP
L2             0 S 99614-01-4/PUR
L3            13 S 99614-01-4/PROC
L4            35 S L1 OR L3
L5             0 S L4 AND POLYMORPH
L6             0 S L4 AND  CRYSTAL AND ALCOHOL
L7             1 S L4 AND  CRYSTAL
L8            24 S L4 AND PY<2000
L9             0 S L8 AND POWDER
L10            0 S L8 AND CRYSTAL?

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L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:353422 CAPLUS
DOCUMENT NUMBER: 136:374797
TITLE: Preparation of **crystal** and solvate forms of ondansetron hydrochloride for use as antiemetics
INVENTOR(S): Lidor-Hadas, Ramy; Aronhime, Judith; Lifshitz, Revital; Weizel, Shlomit; Niddam, Valerie
PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036558	A2	20020510	WO 2001-US48720	20011030
WO 2002036558	A3	20030206		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2426026	AA	20020510	CA 2001-2426026	20011030
AU 2002030935	A5	20020515	AU 2002-30935	20011030
US 2002107275	A1	20020808	US 2001-16752	20011030
EP 1339707	A2	20030903	EP 2001-991193	20011030
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
ZA 2003003000	A	20040716	ZA 2003-3000	20011030
JP 2004525083	T2	20040819	JP 2002-539318	20011030
NO 2003001928	A	20030627	NO 2003-1928	20030429

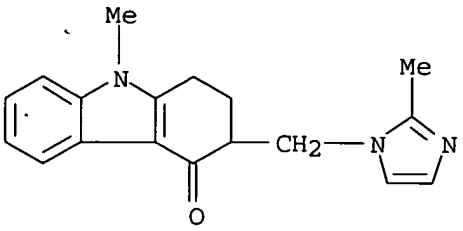
PRIORITY APPLN. INFO.:

US 2000-244283P	P	20001030
US 2000-253819P	P	20001129
US 2001-265539P	P	20010131
WO 2001-US48720	W	20011030

AB The present invention provides novel ondansetron hydrochloride crystalline polymorphic forms and solvates. Processes for making and interconverting the polymorphic forms are also provided. Further, pharmaceutical compns. containing the novel polymorphic forms and hydrates for treating nausea and/or vomiting are described. For example, ondansetron base (400 mg) was suspended in 16 mL of a 1:1 mixture of ethanol and isopropanol at room temperature and the suspension was heated to reflux to dissolve the ondansetron. After 20 min of stirring at reflux, an ethanolic solution containing 1.1 equiv of HCl was added. The reaction mixture was stirred at this temperature for an addnl. 10 min. Evaporation of the solvent gave ondansetron hydrochloride dihydrate Form A.

IT **99614-01-4P**, Ondansetron hydrochloride
RL: PNU (Preparation, unclassified); PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); **PREP (Preparation)**; RACT (Reactant or reagent); USES (Uses)
(preparation of **crystal** and solvate forms of ondansetron hydrochloride for use as antiemetics)

RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 · ANSWER 1 OF 24 CAPLUS · COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:589015 CAPLUS
DOCUMENT NUMBER: 141:111627
TITLE: Buccal, polar and non-polar spray containing alprazolam
INVENTOR(S): Dugger, Harry A.; Abd El-Shafy, Mohammed
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. Ser. No. 230,060.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 16
PATENT INFORMATION:

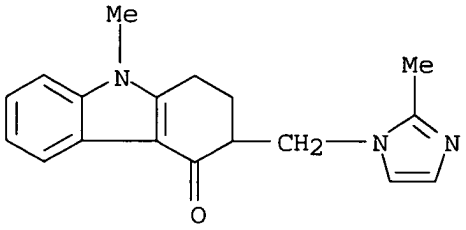
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004141923	A1	20040722	US 2003-671720	20030929
WO 9916417	A1	19990408	WO 1997-US17899	19971001 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
EP 1029536	A1	20000823	EP 2000-109347	19971001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1036561	A1	20000920	EP 2000-109357	19971001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2003077227	A1	20030424	US 2002-230060	20020829
WO 2005030167	A2	20050407	WO 2004-US31797	20040927
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:		
WO 1997-US17899	A2	19971001
US 2000-537118	A2	20000329
US 2002-230060	A2	20020829
EP 1997-911621	A3	19971001
US 2003-671720	A	20030929

AB Buccal aerosol sprays or capsules using polar and non-polar solvents have now been developed which provide alprazolam for rapid absorption through the oral mucosa, resulting in fast onset of effect. The buccal polar compns. of the invention comprise formulation I: aqueous polar solvent, alprazolam, and optional flavoring agent; formulation II: aqueous polar solvent, alprazolam, optionally flavoring agent, and propellant; formulation III: non-polar solvent, alprazolam, and optional flavoring agent; formulation IV: non-polar solvent, alprazolam, optional flavoring agent, and propellant; formulation V: a mixture of a polar solvent and a non-polar solvent, alprazolam, and optional flavoring agent; formulation VI: a mixture of a polar solvent and a non-polar solvent, alprazolam, optional flavoring agent, and propellant.

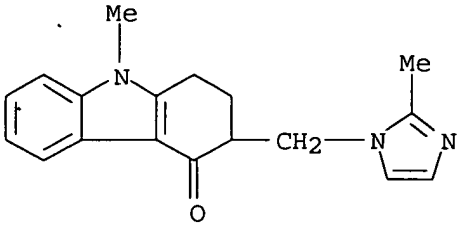
IT **99614-01-4**, Ondansetron hydrochloride
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); **PROC (Process)**; USES (Uses)

(buccal, polar and non-polar spray containing alprazolam)
RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:789977 CAPLUS
DOCUMENT NUMBER: 132:231834
TITLE: Effect of some serotonergic agents on lithium-pilocarpine model of status epilepticus in rats
AUTHOR(S): Kasture, S. B.; Kasture, V. S.
CORPORATE SOURCE: College of Pharmacy, Nashik, 422 002, India
SOURCE: Indian Journal of Pharmacology (**1999**), 31(5), 370-372
CODEN: INJPD2; ISSN: 0253-7613
PUBLISHER: Indian Pharmacological Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To study the effect of some serotonergic agents on lithium-pilocarpine model of status epilepticus in rats. Pilocarpine (30 mg/kg, s.c.) was given 24 h after administration of lithium sulfate (3 meq/kg, i.p.) to induce seizures. The test drugs were given 45 min prior to administration of pilocarpine, except pCPA which was given 72 h before lithium. The effect on severity of convulsions was observed Dexfenfluramine and cisapride significantly potentiated the seizure, whereas buspirone, mianserine, cyproheptadine, fluoxetine, ondanstron and pCPA significantly protected animals from the lithium pilocarpine induced seizures. Thus the study suggests that the blockade of postsynaptic 5-HT receptors and inhibition of serotonergic transmission inhibit lithium-pilocarpine-induced seizure.
IT **99614-01-4**, Ondansetron hydrochloride
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); **PROC (Process)**; USES (Uses)
(effect of serotonergic agents on lithium-pilocarpine model of status epilepticus in rats)
RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

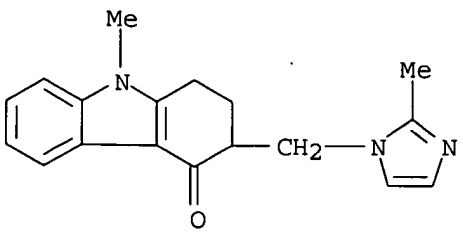
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:739985 CAPLUS
DOCUMENT NUMBER: 132:217043
TITLE: The binding affinity of azasetron hydrochloride for various kinds of receptors
AUTHOR(S): Haga, Keiichiro; Kato, Akira; Matsumoto, Yasuhiro; Takehara, Syuzo
CORPORATE SOURCE: Pharmacology, Drug Development Laboratories, Yoshitomi Pharmaceutical Industries Ltd., Koiwai, Yoshitomi-cho, Chikujo-gun, Fukuoka, 871-8550, Japan
SOURCE: Yakuri to Chiryo (**1999**), 27(9), 1501-1505
CODEN: YACHDS; ISSN: 0386-3603
PUBLISHER: Raifu Saiensu Shuppan K.K.
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The binding affinity of azasetron hydrochloride (azasetron), a potent 5-hydroxy-tryptamine (5-HT)3 receptor antagonist, for the 5-HT1A, 5-HT2, 5-HT4, dopamine D1, D2, D3, D4, adrenaline α1, α2, β, muscarine, histamine H1, benzodiazepine, cholecystokinin (CCK)A, CCKB or sigma receptors was investigated in comparison with those of other 5-HT3 receptor antagonists, ondansetron hydrochloride (ondansetron), granisetron hydrochloride (granisetron) and metoclopramide hydrochloride (metoclopramide). Azasetron has very little affinity for all the kinds of receptors tested in the same way of ondansetron and granisetron. These results indicate that azasetron, ondansetron and granisetron are highly selective 5-HT3 receptor antagonists. Metoclopramide has higher affinity to dopamine D2 and D3 receptors than that to 5-HT3 receptor, therefore it is not a selective 5-HT3 receptor antagonist.

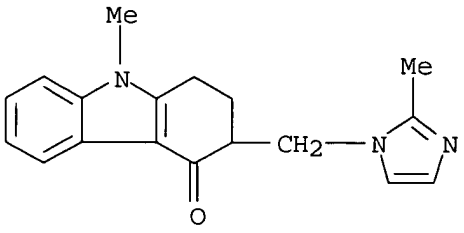
IT **99614-01-4**, Ondansetron hydrochloride
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); **PROC (Process)**
(binding affinity of azasetron hydrochloride compared with other 5-HT3 receptor antagonists for various kinds of receptors)

RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

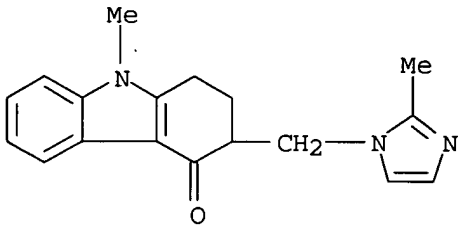
L8 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:621160 CAPLUS
DOCUMENT NUMBER: 132:122552
TITLE: Synthesis of ondansetron hydrochloride
AUTHOR(S): Lu, Jinrong; Shi, Xinzhong
CORPORATE SOURCE: Department of Organic Chemistry, China Pharmaceutical University, Nanjing, 210009, Peop. Rep. China
SOURCE: Zhongguo Yaoke Daxue Xuebao (**1999**), 30(4), 246-248
CODEN: ZHYXE9; ISSN: 1000-5048
PUBLISHER: Zhongguo Yaoke Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The title antiemetic was prepared in 3 steps in 66.3% overall yield from 9-methyl-1,2,3,9-tetrahydro-4H-carbazol-4-one.
IT **99614-01-4P**, Ondansetron hydrochloride
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(synthesis of ondansetron hydrochloride)
RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:450220 CAPLUS
DOCUMENT NUMBER: 131:280939
TITLE: Transdermal iontophoretic delivery of ondansetron HCl
AUTHOR(S): Ding, Pingtian; Li, Wei; Zheng, Junmin
CORPORATE SOURCE: Department of Pharmaceutics, Shenyang Pharmaceutical University, Shenyang, 110015, Peop. Rep. China
SOURCE: Journal of Chinese Pharmaceutical Sciences (**1999**), 8(2), 73-77
CODEN: JCHSE4; ISSN: 1003-1057
PUBLISHER: Beijing Medical University, School of Pharmaceutical Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The permeability of ondansetron at different current densities applied across the full-thickness mouse skin in vitro is reported. The steady state flux of ondansetron was increased from 30.29 μg•cm-2•h-1 to 160.70 μg•cm-2•h-1 when the c.d. changed from 0.05 mA•cm-2 to 0.3 mA•cm-2. But there was no strict linear relationship. Discoloration of ondansetron solution was found when platinum electrode was used in the donor compartment, which would be overcome by using Ag as electrode. The pH values in both donor and receptor compartments were changed in the study when platinum electrode was applied. The problems mentioned above and the keys to them were discussed.
IT **99614-01-4**, Ondansetron hydrochloride
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); **PROC (Process)**; USES

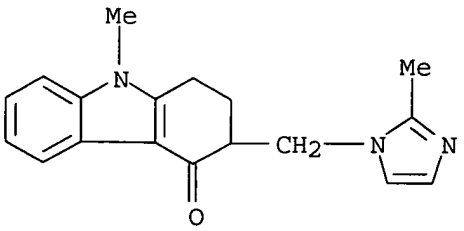
(Uses)
(transdermal iontophoretic delivery of ondansetron HCl)
RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:188173 CAPLUS
DOCUMENT NUMBER: 128:204771
TITLE: Studies on the synthesis and analysis of impurities and decomposition product of ondansetron hydrochloride
AUTHOR(S): Tu, Shuzi; Ni, Kunyi; Chen, Guohua; Wu, Zhenjie
CORPORATE SOURCE: Research Center for Drugs of Family Planning, China Pharmaceutical University, Nanjing, 210009, Peop. Rep. China
SOURCE: Zhongguo Yaoke Daxue Xuebao (**1997**), 28(4), 198-200
CODEN: ZHYXE9; ISSN: 1000-5048
PUBLISHER: Zhongguo Yaoke Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB On the basis of the different synthetic routes, 5 impurities and decomposition products were determined in ondansetron hydrochloride by RP-HPLC with cyanide column. Good separation results were obtained and a method for controlling quality of ondansetron hydrochloride was developed.
IT **99614-01-4P**, Ondansetron hydrochloride
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(studies on the synthesis and anal. of impurities and decomposition product of ondansetron hydrochloride)
RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 · ANSWER 7 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:89839 CAPLUS
DOCUMENT NUMBER: 128:102091
TITLE: Preparation of carbazolones
INVENTOR(S): He, Ping; Fan, Guoping
PATENT ASSIGNEE(S): Shanghai Hualian Pharmaceutical Co., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1145902	A	19970326	CN 1995-111775	19950922 <--
PRIORITY APPLN. INFO.:			CN 1995-111775	19950922

OTHER SOURCE(S): CASREACT 128:102091; MARPAT 128:102091
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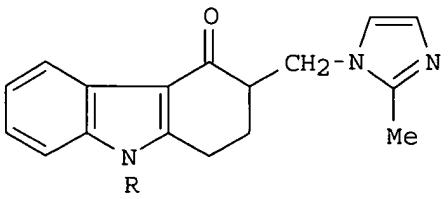

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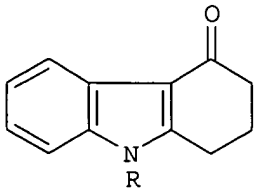
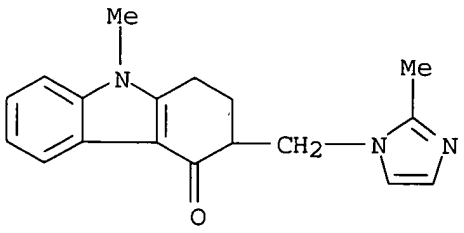


II

AB Imidazolymethylcarbazolones I (R = H, Me, Et, Pr, iso-Pr, cyclopentyl, etc.) and their salts were prepared from carbazolones II by alkoxycarbonylation with dialkyl carbonates followed by condensation with 1-(chloromethyl)-2-methylimidazole. Thus, reaction of II (R = H) with di-Et carbonbate gave Et 1,2,3,9-tetrahydrocarbazol-4-one-3-carboxylate, condensation of which with 1-(chloromethyl)-2-methylimidazole gave, after treatment with 20% HCl, the hydrochloride salt of I (R = H).

IT **99614-01-4P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of carbazolones)

RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

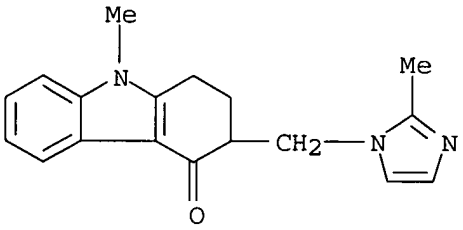
L8 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:87211 CAPLUS
DOCUMENT NUMBER: 126:190790
TITLE: Compatibility of commonly used bone marrow transplant drugs during Y-site delivery

AUTHOR(S): Najari, Najari; Rusho, William
CORPORATE SOURCE: Department of Pharmacy Services, University Hospitals and Clinics (UHS), University of Utah Health Sciences Center (UUHSC), Salt Lake City, USA
SOURCE: American Journal of Health-System Pharmacy (**1997**), 54(2), 181-184
CODEN: AHSPEK; ISSN: 1079-2082
PUBLISHER: American Society of Health-System Pharmacists
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The Y-site compatibility of drugs routinely used in bone marrow transplant patients was studied. Two methods were used to evaluate the compatibility of pairs of various i.v. drugs and nutrient fluids. In the 1st, the drugs were combined in a 1:1 ratio in test tubes, which were visually evaluated immediately and after 1, 4, and 24 h under normal light and against a white background. The 2nd method involved simulated infusion through a Y-site and a membrane filter. The filter disks were examined under magnification for ppts. "Administration" time ranged from 1 min to 5 h. Most of the combinations were compatible. Exceptions (incompatibilities or inconclusive findings) were amikacin plus a total parenteral nutrient (TPN) mixture; cyclosporine plus dopamine-HCl, MgSO4, ondansetron, a parenteral nutrient solution, the TPN mixture, or the TPN mixture with phytonadione; and heparin sodium in either 5% dextrose injection or 0.9% NaCl injection plus the TPN mixture or vancomycin. Results from the 2 study methods were in agreement for all drug combinations except those involving cyclosporine. Cyclosporine in 0.9% NaCl injection yielded many fine particles on the filter disk. The combination of cyclosporine with other drugs did not appear to increase the number of particles on the disk, but the results must still be considered inconclusive.

IT **99614-01-4**, Ondansetron hydrochloride
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); **PROC (Process)**
(phys. compatibility of drugs commonly used in bone marrow transplant)

RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:626646 CAPLUS
DOCUMENT NUMBER: 125:264778
TITLE: 5-HT3 receptor antagonist (ondansetron hydrochloride). Zofran inj. 4 and Zofran tab. 4
AUTHOR(S): Kitazawa, Tsuyoshi
CORPORATE SOURCE: Nippon Glaxo Ltd., Japan
SOURCE: Saibo (**1996**), 28(10), 414-417
CODEN: SAIBD8; ISSN: 0386-4766
PUBLISHER: Nyu Saiensusha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

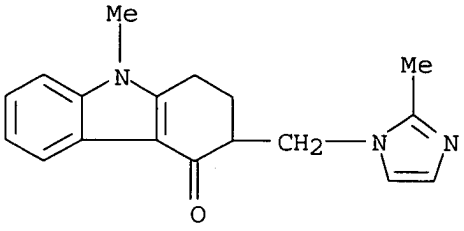
AB A review, with 23 refs., of the pharmacokinetics, side effects, and clin.

pharmacol. of the 5-HT receptor antagonist ondansetron hydrochloride injections and tablets (Zofran 4 and Zofran tab. 4).

IT **99614-01-4**, Ondansetron hydrochloride
RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); **PROC (Process)**; USES (Uses)
(5-HT3 receptor antagonist (ondansetron hydrochloride). Zofran inj. 4 and Zofran tab. 4)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:398114 CAPLUS

DOCUMENT NUMBER: 125:95819

TITLE: Stability of ondansetron hydrochloride and five antineoplastic medications

AUTHOR(S): Stewart, James T.; Warren, Flynn W.; King, Deanne T.; Fox, Janet L.

CORPORATE SOURCE: Department Medicinal Chemistry, University Georgia, Athens, GA, USA

SOURCE: American Journal of Health-System Pharmacy (**1996**), 53(11), 1297-1300
CODEN: AHSPEK; ISSN: 1079-2082

PUBLISHER: American Society of Health-System Pharmacists

DOCUMENT TYPE: Journal

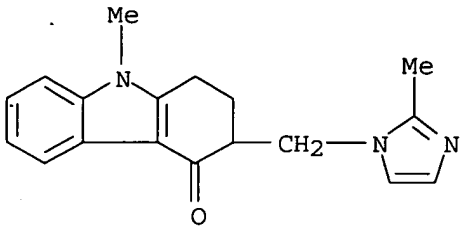
LANGUAGE: English

AB Stability of solns. containing ondansetron hydrochloride (I) and five other antineoplastic medications is studied. The stability of I at 0.30 and 0.03 mg/mL was not affected by the presence of any of cytarabine, dacarbazine, etoposide, doxorubicin.HCl, or methotrexate sodium at 0.3, and 0.03 mg/mL. Similarly, the stability of the antineoplastic drugs was unaffected by I.

IT **99614-01-4**, Ondansetron hydrochloride
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); **PROC (Process)**; USES (Uses)
(stability of ondansetron hydrochloride and five antineoplastic medications)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



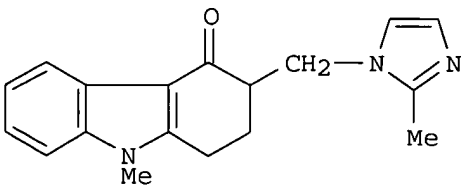
● HCl

=>

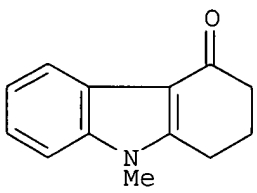
L8 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:353207 CAPLUS
DOCUMENT NUMBER: 125:33645
TITLE: Preparation of 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one and its salts
INVENTOR(S): Zhang, Yuebin; Wang, Anmin; Qi, Yunliang
PATENT ASSIGNEE(S): Qilu Pharmaceutical Factory, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1113913	A	19951227	CN 1994-110609	19940527 <--
PRIORITY APPLN. INFO.:			CN 1994-110609 A	19940527
			CN 1994-110549	19940421

GI



I



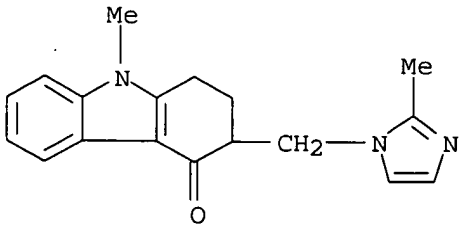
II

AB The title compound (I) and its salts, useful as pharmaceuticals (no data), are prepared by Mannich reaction of II. A mixture of II 30, 2-methylimidazole hydrochloride 100, and paraformaldehyde 45 g was heated to 135°, cooled to room temperature, dissolved in MeOH and the solution refluxed to give 29.5 g I.HCl.

IT **99614-01-4P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one and its salts)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

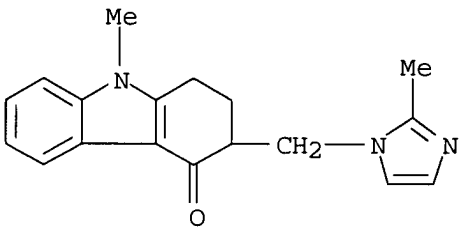
L8 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:321916 CAPLUS
DOCUMENT NUMBER: 125:18979

TITLE: Compatibility of thiotepa (lyophilized) with selected drugs during simulated Y-site administration
AUTHOR(S): Trissel, Lawrence A.; Martinez, Juan F.
CORPORATE SOURCE: M. D. Anderson Cancer Center, University of Texas, Houston, TX, 77030, USA
SOURCE: American Journal of Health-System Pharmacy (**1996**), 53(9), 1041-1045
CODEN: AHSPEK; ISSN: 1079-2082
PUBLISHER: American Society of Health-System Pharmacists
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Five-milliliter samples of thiotepa (lyophilized) (1 mg/mL in 5% dextrose solution) were combined with 5 mL each of 100 other drugs, including antineoplastics, anti-infectives, and supportive care drugs, in 5% dextrose or 0.9% NaCl. The combinations were stored at room temperature (.apprx.23°) under constant fluorescent light. Visual examns. were performed with the unaided eye immediately and after 1 and 4 h and, if there was no obvious incompatibility, with a high-intensity monodirectional light beam to enhance visualization of small particles and low-level turbidity. The turbidity of each combination was measured as well. Particle sizing and counting were performed on selected solns. Two drugs exhibited incompatibilities with thiotepa. The thiotepa-cisplatin combination developed turbidity in 4 h, and the thiotepa-minocycline-HCl combination developed a bright yellow-green discoloration in 1 h. All the other test drugs were compatible with thiotepa for at ≥4 h at room temperature

IT **99614-01-4**, Ondansetron hydrochloride
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); **PROC (Process)**
(physicochem. compatibility of drugs with thiotepa during simulated i.v. administration)

RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

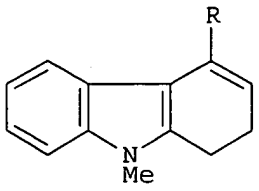


● HCl

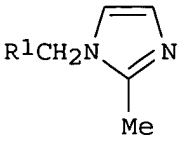
L8 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:998115 CAPLUS
DOCUMENT NUMBER: 124:176098
TITLE: Preparation of 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one
INVENTOR(S): Zhang, Yuebin; Wang, Anmin
PATENT ASSIGNEE(S): Qilu Pharmaceutical Factory, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1105364	A	19950719	CN 1993-115273	19931222 <--

PRIORITY APPLN. INFO.: CN 1993-115273 19931222
OTHER SOURCE(S): CASREACT 124:176098; MARPAT 124:176098
GI



II



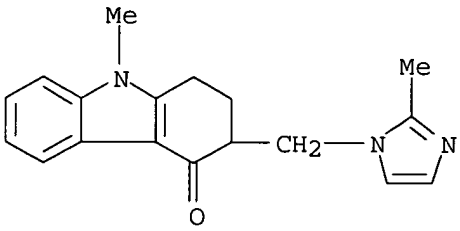
III

AB The title compound (I) was prepared by reaction of enamines II (R = NR22, N-R3; R2 = alkyl, cycloalkyl, aryl; NR22 = pyrrolidino, piperidino, , morpholino, etc.; R3 = alkyl, cycloalkyl, aryl) with imidazoles III (R1 = halo, sulfonyloxy, OH, alkoxy). Thus, reaction of 1,2,3,9-tetrahydro-9-methyl-4H-carbazol-4-one with pyrrolidine in toluene in the presence of p-toluenesulfonic acid gave the enamine intermediate, which was refluxed with 1-(chloromethyl)-2-methyl-1H-imidazole in acetonitrile for 6 h to give, after treatment with aqueous HCl, hydrochloride salt of I.

IT **99614-01-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of (imidazolylmethyl)tetrahydrocarbazolone)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:997817 CAPLUS
DOCUMENT NUMBER: 124:176095
TITLE: Preparation of 3-[(2-methyl-1-imidazolyl)methyl]-9-methy-1,2,3,9-tetrahydro-4H-carbazol-4-one
INVENTOR(S): Dong, Jichang
PATENT ASSIGNEE(S): Shanghai Medical University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1105994	A	19950802	CN 1994-112257	19940808 <--
CN 1035672	B	19970820		

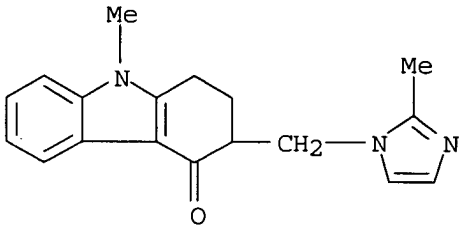
PRIORITY APPLN. INFO.: CN 1994-112257 19940808
OTHER SOURCE(S): CASREACT 124:176095
AB The title compound (I) was prepared by reaction of 1,2,3,9-tetrahydro-9-methyl-4H-carbazol-4-one (II) with CH2O or paraformaldehyde and 2-methylimidazole

in organic solvent in the presence of secondary amine or secondary amine salt and acid, or acidic ion exchange resin. Thus, reaction of II with 2-methylimidazole and paraformaldehyde in the presence of dimethylamine hydrochloride and 732-type ion exchange resin in EtOH at 50-140° for 80-200 h gave I.

IT **99614-01-4P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of (methylimidazolyl)methyltetrahydrocarbazolone)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:533965 CAPLUS
DOCUMENT NUMBER: 121:133965
TITLE: Process for preparing carbazolone derivatives
INVENTOR(S): Bod, Peter; Harsanyi, Kalman; Trischler, Ferenc; Fekecs, Eva; Csehi, Attila; Hegedues, Bela; Mersich, Eva; Szabo, Gyoergyi; Horvath, Erika
PATENT ASSIGNEE(S): Richter Gedeon Vegyeszeti Gyar Rt., Hung.
SOURCE: Can. Pat. Appl., 28 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2106642	AA	19940415	CA 1993-2106642	19930921 <--
HU 65378	A2	19940502	HU 1992-3223	19921014 <--
HU 212785	B	19961128		
HU 67103	A2	19950228	HU 1992-3222	19921014 <--
HU 212934	B	19961230		
LV 10948	B	19960420	LV 1993-1096	19930927 <--
LT 3074	B	19941125	LT 1993-1401	19931004 <--
EP 595111	A1	19940504	EP 1993-116542	19931013 <--
EP 595111	B1	19970910		
EP 595111	B2	20010816		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1089941	A	19940727	CN 1993-119192	19931013 <--
CN 1052979	B	20000531		
JP 06293734	A2	19941021	JP 1993-255880	19931013 <--
JP 3378315	B2	20030217		
US 5416221	A	19950516	US 1993-135407	19931013 <--
AT 157973	E	19970915	AT 1993-116542	19931013 <--
ES 2106936	T3	19971116	ES 1993-116542	19931013 <--
PL 174173	B1	19980630	PL 1993-300685	19931013 <--
PL 174526	B1	19980831	PL 1993-324329	19931013 <--
CZ 284223	B6	19980916	CZ 1993-2156	19931013 <--
RU 2119914	C1	19981010	RU 1993-49416	19931013 <--

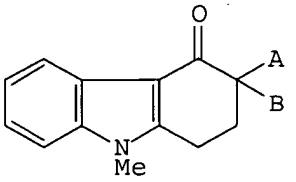
SK 281243	B6	20010118	SK 1993-1110		19931013
US 5478949	A	19951226	US 1994-344871		19941125 <--
CN 1235967	A	19991124	CN 1999-106445		19990511 <--
CN 1083430	B	20020424			

PRIORITY APPLN. INFO.:

HU 1992-3222	A	19921014
HU 1992-3223	A	19921014
US 1993-135407	A3	19931013

OTHER SOURCE(S): CASREACT 121:133965; MARPAT 121:133965

GI



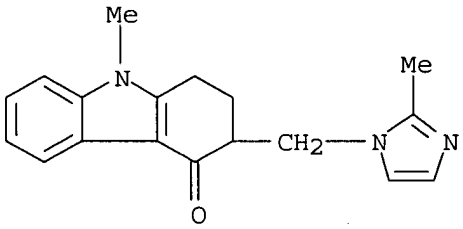
I

AB Title compds. I (A = RCH2 wherein A = HO, 2-methyl-1H-imidazol-1-yl; B = R1O2CCO wherein R1 = H, Me, Et; AB = R2O2CC(OH): wherein R2 = Me, Et, COCO2CH2) intermediates in the preparation of the known drug ondansetron (II), are prepared by an improved process. Na was added to a mixture containing 9-methyl-1,2,3,9-tetrahydro-4H-carbazol-4-one and di-Et oxalate to give I (AB = ethoxalyl) which was converted to I (AB = COCO2CO). This in 1,4-dioxane and Et3N was reacted with 2-methylimidazole to give II.

IT **99614-01-4P**, Ondansetron hydrochloride
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

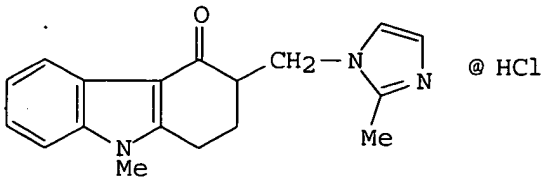


● HCl

L8 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1994:164116 CAPLUS
DOCUMENT NUMBER:	120:164116
TITLE:	Synthesis of antiemetic ondansetron
AUTHOR(S):	Chen, Guohua
CORPORATE SOURCE:	Res. Cent. Drugs Family Plann., China Pharm. Univ., Nanjing, 210009, Peop. Rep. China
SOURCE:	Zhongguo Yiyao Gongye Zazhi (**1993**), 24(6), 241-2 CODEN: ZYGZEA; ISSN: 1001-8255
DOCUMENT TYPE:	Journal
LANGUAGE:	Chinese
OTHER SOURCE(S):	CASREACT 120:164116

GI



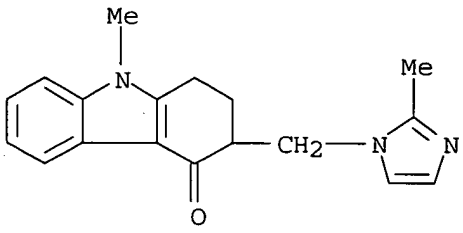
I

AB Stirring a mixture of 1,2,3,9-tetrahydro-4H-carbazol-4-one, K2CO3, acetone, and Me2SO4 at room temperature for 36 h gave the 9-Me derivative, whose Mannich reaction with paraformaldehyde and Me2NH.HCl gave the 9-methyl-3-[(dimethylamino)methyl] derivative, which was treated with 2-methyl-1H-imidazole followed by treatment with HCl gave the title compound (I).

IT **99614-01-4P**, Ondansetron hydrochloride
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of, from 9H-carbazol-4-one via methylation, Mannich reaction, and reaction with methylimidazole)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:30713 CAPLUS

DOCUMENT NUMBER: 120:30713

TITLE: Synthesis of ondansetron

AUTHOR(S): Tu, Shuzi; Shi, Xinzhong

CORPORATE SOURCE: Dep. Org. Chem., China Pharm. Univ., Nanjing, 210009, Peop. Rep. China

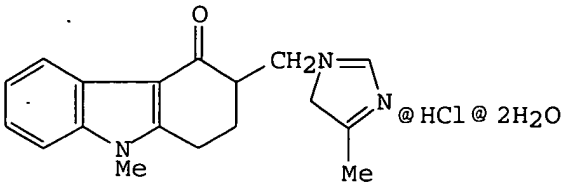
SOURCE: Zhongguo Yiyao Gongye Zazhi (**1993**), 24(4), 145-6
CODEN: ZYGZEA; ISSN: 1001-8255

DOCUMENT TYPE: Journal

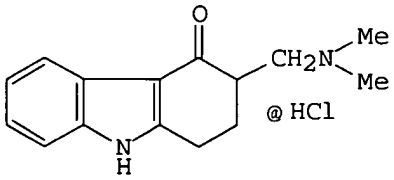
LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 120:30713

GI



I



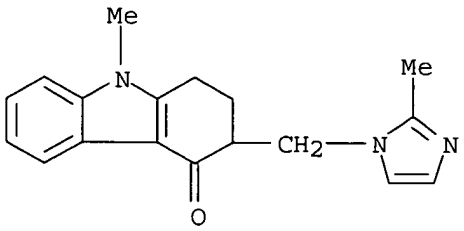
II

AB The selective 5-HT3 receptor antagonist, ondansetron (I), was synthesized from 3-[(dimethylamino)methyl]-1,2,3,9-tetrahydro-4H-carbazol-4-one hydrochloride (II) via condensation with 2-methylimidazole and methylation with Me iodide. Compound II was obtained from cyclohexanone by cyclization, oxidation and Mannich reaction. The overall yield was 10.4%.

IT **99614-01-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:128875 CAPLUS

DOCUMENT NUMBER: 114:128875

TITLE: The chemistry of ondansetron

AUTHOR(S): Mackinnon, J. W. M.; Collin, D. T.

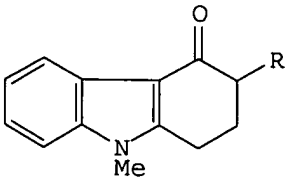
CORPORATE SOURCE: Glaxo Group Res. Ltd., Ware/Hertfordshire, SG12 0DP, UK

SOURCE: European Journal of Cancer & Clinical Oncology (**1989**), 25(Suppl. 1), S61
CODEN: EJCODS; ISSN: 0277-5379

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



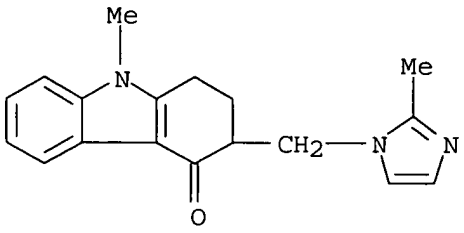
I

AB Ondansetron hydrochloride (I; R = 2-methyl-1H-imidazol-1-ylmethyl) was prepared in 3 steps from tetrahydrocarbazolone I (R = H) and 2-methylimidazole.

IT **99614-01-4P**, Ondansetron hydrochloride
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:145436 CAPLUS

DOCUMENT NUMBER: 112:145436

TITLE: Pharmaceutical development of ondansetron injection

AUTHOR(S): Leak, R. E.; Woodford, J. D.

CORPORATE SOURCE: Glaxo Group Res. Ltd., Ware/Hertfordshire, SG12 0DP, UK

SOURCE: European Journal of Cancer & Clinical Oncology (**1989**), 25(Suppl. 1), S67-S69
CODEN: EJCODS; ISSN: 0277-5379

DOCUMENT TYPE: Journal

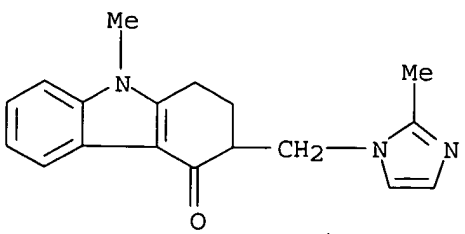
LANGUAGE: English

AB Ondansetron (I) injection is an aqueous solution containing I-HCl.2H2O. The pH of the injection was selected to achieve good phys. and chemical stability. The shelf life is 3 yr when stored <30°, protected from light. I injection may be diluted for administration by slow i.v. injection or infusion and is compatible with several i.v. infusion fluids. In addition, specific concns. of cisplatin, 5-fluorouracil, carboplatin, etoposide, ceftazidime, cyclophosphamide and doxorubicin are compatible when administered via a giving set delivering I by infusion.

IT **99614-01-4P**, Ondansetron hydrochloride
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(injections, preparation and stability and compatibility with parenteral solns. of)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



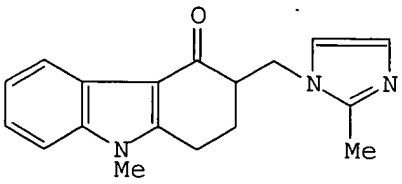
● HCl

L8 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:205704 CAPLUS
DOCUMENT NUMBER: 110:205704
TITLE: Imidazolylmethylcarbazolone derivative as antidepressant
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63165314	A2	19880708	JP 1987-318455	19871216 <--
JP 2732844	B2	19980330		
DK 8706627	A	19880618	DK 1987-6627	19871216 <--
AU 8782617	A1	19880623	AU 1987-82617	19871216 <--
AU 608794	B2	19910418		
EP 276559	A2	19880803	EP 1987-311082	19871216 <--
EP 276559	A3	19891018		
EP 276559	B1	19920805		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4835173	A	19890530	US 1987-133887	19871216 <--
AT 79031	E	19920815	AT 1987-311082	19871216 <--
ES 2051754	T3	19940701	ES 1987-311082	19871216 <--
ZA 8709458	A	19881130	ZA 1987-9458	19871217 <--

PRIORITY APPLN. INFO.: GB 1986-30071 A 19861217
EP 1987-311082 A 19871216

GI



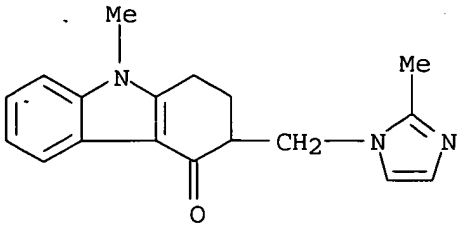
I

AB 1,2,3,9-Tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one (I), its physiol.-acceptable salts, and its solvates are prepared as antidepressants. 3-[(Dimethylamino)methyl]-1,2,3,9-tetrahydro-9-methyl-4H-carbazol-4-one-HCl in water was treated with 2-methylimidazole, and the mixture refluxed 20 h, cooled, and filtered. The residue was washed with water and crystallized in MeOH to give I m.p. 231-232°.

IT **99614-01-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of, as antidepressant)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



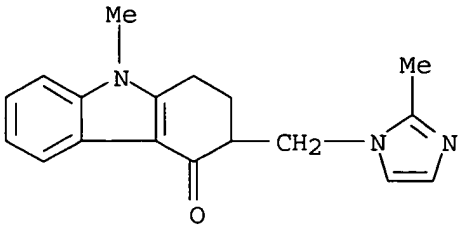
● HCl

L8 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:160385 CAPLUS
DOCUMENT NUMBER: 110:160385
TITLE: Antiemetic pharmaceuticals containing 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one and ranitidine
INVENTOR(S): Tyers, Michael Brian
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3740351	A1	19880609	DE 1987-3740351	19871127 <--
AU 609028	B2	19910426	AU 1986-67037	19861230 <--
AU 8667037	A1	19880630		
DK 8706246	A	19880529	DK 1987-6246	19871127 <--
SE 8704747	A	19880529	SE 1987-4747	19871127 <--
NL 8702853	A	19880616	NL 1987-2853	19871127 <--
GB 2200046	A1	19880727	GB 1987-27836	19871127 <--
GB 2200046	B2	19900926		
JP 63198623	A2	19880817	JP 1987-299653	19871127 <--
FR 2613934	A1	19881021	FR 1987-16489	19871127 <--
FR 2613934	B1	19930709		
ZA 8708927	A	19881026	ZA 1987-8927	19871127 <--
CH 672068	A	19891031	CH 1987-4613	19871127 <--
BE 1002249	A4	19901106	BE 1987-1354	19871127 <--
CA 1296637	A1	19920303	CA 1987-552962	19871127 <--
AT 8703125	A	19920515	AT 1987-3125	19871127 <--
AT 395374	B	19921210		
IL 84638	A1	19920525	IL 1987-84638	19871127 <--
AU 8781914	A1	19880602	AU 1987-81914	19871130 <--
AU 616386	B2	19911031		

PRIORITY APPLN. INFO.: GB 1986-28474 A 19861128
OTHER SOURCE(S): CASREACT 110:160385
AB Pharmaceuticals for use in human or veterinary medicine contain 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl)]-4H-carbazol-4-one (I) or its salt or solvate and ranitidine (II) or its salt. 3-[(Dimethylamino)methyl]-1,2,3,9-tetrahydro-9-methyl-4H-carbazol-4-one-HCl (1.7 g) was refluxed with 1.4 g 2-methylimidazole in H2O for 20 h to give 1.4 g I, which (18.3 g) was treated with a mixture containing iso-PrOH 90, H2O 18.3, and concentrate HCl 6.25 mL at room temperature for 17 h to give 20.6 g I-HCl.2H2O (III). Tablets contained II-HCl 168.00, III 5.00, microcryst. cellulose 100.00, anhydrous lactose 75.25, and Mg stearate 1.75 mg each.
IT **99614-01-4P**
RL: **PREP (Preparation)**
(preparation of, for pharmaceutical use)
RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-

yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:141572 CAPLUS
DOCUMENT NUMBER: 110:141572
TITLE: 1,2,3,9-Tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one for treatment of cognitive disorders
INVENTOR(S): Tyers, Michael Brian
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

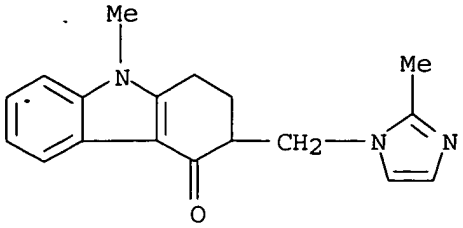
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 275668	A2	19880727	EP 1987-311078	19871216 <--
EP 275668	A3	19891011		
EP 275668	B1	19920930		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8706626	A	19880618	DK 1987-6626	19871216 <--
AU 8782614	A1	19880623	AU 1987-82614	19871216 <--
AU 618520	B2	19920102		
JP 63253083	A2	19881020	JP 1987-318456	19871216 <--
US 4845115	A	19890704	US 1987-133884	19871216 <--
AT 81001	E	19921015	AT 1987-311078	19871216 <--
ES 2052585	T3	19940716	ES 1987-311078	19871216 <--
ZA 8709457	A	19881130	ZA 1987-9457	19871217 <--

PRIORITY APPLN. INFO.:
GB 1986-30075 A 19861217
GB 1987-26424 A 19871111
EP 1987-311078 A 19871216

AB The title compound (I) is a drug for the treatment of dementia and other cognitive disorders. A mixture of 3-[(dimethylamino)methyl]-1,2,3,9-tetrahydro-9-methyl-1,2,3,9-tetrahydro-9-methyl-4H-carbazol-4-one-HCl, 2-methylimidazole and H2O was refluxed for 20 h, to give I. I (1 and 10 mg/kg; s.c.) administered twice a day improved the performance of marmosets in a reverse learning task (Baker, H. F., et al., 1987). A tablet contained I 4.6888, CaHPO4 83.06, croscarmellose Na 1.8 and Mg stearate 0.45 mg.

IT **99614-01-4P**
RL: **PREP (Preparation)**
(preparation of, as drug for treatment of cognitive disorders)

RN 99614-01-4 CAPLUS
CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



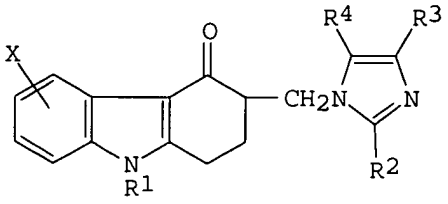
● HCl

L8 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1987:576032 CAPLUS
DOCUMENT NUMBER: 107:176032
TITLE: Preparation of tetrahydrocarbazolone derivatives as serotonin antagonists
INVENTOR(S): Coates, Ian Harold; Bell, James Angus; Humber, David Cedric; Ewan, George Blanch
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Eur. Pat. Appl., 54 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 219193	A1	19870422	EP 1986-305674	19860723 <--
EP 219193	B1	19920527		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4725615	A	19880216	US 1986-888258	19860723 <--
AT 76642	E	19920615	AT 1986-305674	19860723 <--
JP 62077382	A2	19870409	JP 1986-174685	19860724 <--

PRIORITY APPLN. INFO.: GB 1985-18743 A 19850724
EP 1986-305674 A 19860723

GI



I

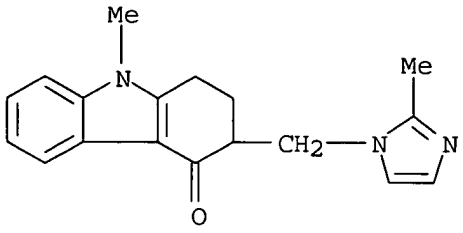
AB Tetrahydrocarbazolones I (R1 = H, C1-10 alkyl, C3-7 cycloalkyl, C3-7 cycloalkyl-C1-4-alkyl, C3-6 alkenyl, C3-10 alkynyl, Ph, phenyl-C1-3 alkyl; one of R2, R3, R4 = H, C1-6 alkyl, C3-9 cycloalkyl, C2-6 alkenyl, phenyl-C1-3-alkyl, each of the other groups = H, C1-6 alkyl; X = halo, OH, C1-4 alkoxy, phenyl-C1-3-alkoxy, C1-6 alkyl, NR5R6, CONR56; R5, R6 = H, C1-4 alkyl, C3-4 alkenyl; NR5R6 = saturate 5-7 membered ring) and their salts, potent and selective neuronal 5-hydroxytryptamine receptor antagonists and useful in the treatment of psychotic disorders (e.g. schizophrenia and mania), anxiety, pain, gastric stasis, symptoms of gastrointestinal dysfunction such as occur with dyspepsia, peptic ulcer, reflux esophagitis, and flatulence, migraine, nausea, and vomiting (no data), were prepared by 6 methods. 4-FC6H4NHNH2.HCl reacted with 1,3-cyclohexanedione to give 3-hydroxy-2-cyclohexen-1-one (4-fluorophenyl)hydrazone which was cyclized with ZnCl2 in refluxing EtOAc to give 6-fluoro-1,2,3,9-tetrahydro-4H-carbazol-4-one. This was

methylated with Me2SO4 to the 9-Me derivative, aminomethylation of which with paraformaldehyde and Me2NH.HCl gave 3-[(dimethylamino)methyl]-6-fluoro-1,2,3,9-tetrahydro-9-methyl-4H-carbazol-4-one. This reacted successively with MeI and 2-methylimidazole to give I (R1 = R2 = Me, R3 = R4 = H, X = 6-F). A formulation for injection comprised active ingredient 2.0 mg/mL, NaCl as required, and H2O for injection to 1.0 mL.

IT **99614-01-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of, as 5-hydroxytryptamine receptor antagonist)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L8 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:19589 CAPLUS
DOCUMENT NUMBER: 104:19589
TITLE: Heterocyclic compounds acting on specific 5-hydroxytryptamine receptors
INVENTOR(S): Coates, Ian Harold; Bell, James Angus; Humber, David Cedric; Ewan, George Blanch
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Ger. Offen., 58 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3502508	A1	19850814	DE 1985-3502508	19850125 <--
DE 3502508	C2	19900503		
BE 901576	A1	19850725	BE 1985-214394	19850125 <--
DK 8500357	A	19850726	DK 1985-357	19850125 <--
DK 169521	B1	19941121		
FI 8500323	A	19850726	FI 1985-323	19850125 <--
FI 84349	B	19910815		
FI 84349	C	19911125		
NO 8500300	A	19850726	NO 1985-300	19850125 <--
NO 164025	B	19900514		
NO 164025	C	19900822		
SE 8500368	A	19850726	SE 1985-368	19850125 <--
SE 460359	B	19891002		
SE 460359	C	19900201		
AU 8538097	A1	19850801	AU 1985-38097	19850125 <--
AU 579132	B2	19881117		
NL 8500202	A	19850816	NL 1985-202	19850125 <--
NL 190373	B	19930901		
NL 190373	C	19940201		
GB 2153821	A1	19850829	GB 1985-1889	19850125 <--
GB 2153821	B2	19880120		
FR 2561244	A1	19850920	FR 1985-1056	19850125 <--

FR 2561244	B1	19880304			
JP 60214784	A2	19851028	JP 1985-12318	19850125	<--
JP 03078862	B4	19911217			
HU 37784	A2	19860228	HU 1985-296	19850125	<--
HU 193592	B	19871130			
ES 539852	A1	19860716	ES 1985-539852	19850125	<--
ZA 8500619	A	19860924	ZA 1985-619	19850125	<--
CH 664152	A	19880215	CH 1985-346	19850125	<--
IL 74165	A1	19881115	IL 1985-74165	19850125	<--
CA 1252793	A1	19890418	CA 1985-472888	19850125	<--
AT 8500204	A	19900815	AT 1985-204	19850125	<--
AT 392276	B	19910225			
CN 85105643	A	19870506	CN 1985-105643	19850724	<--
CN 1011237	B	19910116			
ES 548430	A1	19871001	ES 1985-548430	19851031	<--
ES 556101	A1	19871216	ES 1986-556101	19860616	<--
US 4695578	A	19870922	US 1986-931032	19861117	<--
SK 277923	B6	19950809	SK 1991-4043	19911223	<--

PRIORITY APPLN. INFO.:	GB 1984-1888	A	19840125
	GB 1984-25959	A	19841015
	GB 1985-1727	A	19850123
	GB 1985-1728	A	19850123
	US 1985-694790	A2	19850125
	US 1986-820743	A1	19860122

OTHER SOURCE(S): CASREACT 104:19589

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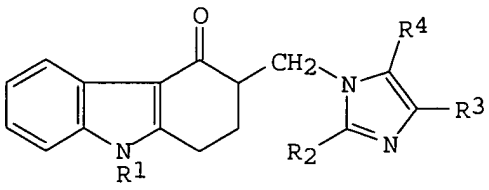


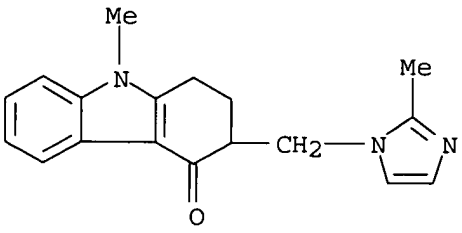
I

AB Antidepressant and analgesic (no data) 3-(imidazol-2-ylmethyl)-4H-carbazol-4-ones I (R1 = H, alkyl, alkenyl, Ph, phenylalkyl; 1 of R2-R4 = H, alkyl, alkenyl, phenylalkyl, the others = H, alkyl) were prepared Thus, 3.809 3-[(dimethylamino)methyl]-1,2,3,9-tetrahydro-4H-carbazol-4-one was treated with MeI to give 5.72 g 2,3,4,9-tetrahydro-N,N,N,9-tetramethyl-4-oxo-1H-carbazole-4-methanaminium iodide which (2.0 g) was stirred at 95° in DMF with 2-methylimidazole to give 0.60 g I (R1 = R2 = Me, R3 = R4 = H).

IT **99614-01-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of, as analgesic and antidepressant)

RN 99614-01-4 CAPLUS

CN 4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl